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**PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Michael G. Lowery, *et al.*

Serial No.: 10/763,548

Filed: January 23, 2004

For: METHOD FOR DETECTING  
ARTIFACTS IN DATA

Examiner: Not yet assigned

Group Art Unit: 3736

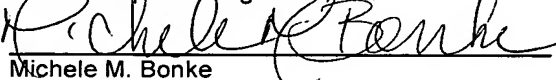
Case No.: 7286.US.O1

**Certificate of Mailing under 37 CFR §1.8(a):**

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA22313-1450, on:

Date of Deposit: August 12, 2004

  
Michele M. Bonke

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Alexandria, VA 22313 - 1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed, to the knowledge of the undersigned, before the mailing date of a first Office Action on the merits. Applicants respectfully petition and request that the Examiner consider the listed documents and evidence such consideration by making appropriate notations on the attached form. Copies of the listed documents, except for the listed United States patents and United States patent application publication are attached.

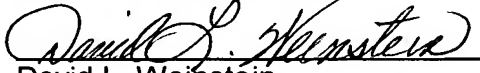
This submission does not represent that a search has been made or that no better art exists, and does not constitute an admission that each or all of the listed documents are material or constitute "prior art". If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

The Commissioner is authorized to charge our Deposit Account any additional fees (or credit any over payments) that may be required under 37 C.F.R. §§ 1.16 and 1.17 in association with this communication for which full payment has not been tendered.

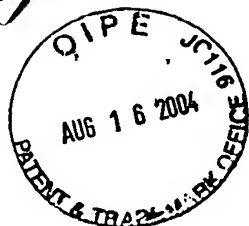
23492

ABBOTT LABORATORIES  
Telephone: (847) 937-6182  
Facsimile: (847) 938-2623

Respectfully submitted,  
Michael G. Lowery et al.

A handwritten signature in cursive script, appearing to read "David L. Weinstein", written over a horizontal line.

David L. Weinstein  
Registration No. 28, 128  
Attorney for Applicants



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*Michele M. Bonke*  
Michele M. Bonke

TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed herewith is the Information Disclosure Statement of Nonprovisional Application of Michael G. Lowery, *et al.* for Serial No. 10/763,548, filed January 23, 2004.

Also enclosed are:

PTO Form 1499  
Copies of Nine References Cited  
Return Receipt Postcard

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR 1.16, as well as any patent application processing fees under 37 CFR 1.17 associated with this communication for which full payment has not been tendered, to Deposit Account No. 01-0025. **A duplicate copy of this sheet is enclosed.**

23492

ABBOTT LABORATORIES  
Telephone: (847) 937-6182  
Facsimile: (847) 938-2623

Respectfully submitted,  
Michael G. Lowery, *et al.*

*David L. Weinstein*  
David L. Weinstein  
Registration No. 28,128  
Attorney for Applicants

## Form PTO - 1449 (Modified)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE  
(Modified) PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

7286.US.O1

SERIAL NO.

10/763,548

APPLICANT

Michael G. Lowery et al.

FILING DATE

01/23/2004

GROUP

3736

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
	A1	5,782,757	07/21/1998	Diab et al.			
	A2	6,002,957	12/14/1999	Finneran			
	A3	6,018,673	01/25/2000	Chin et al.			
	A4	6,067,462	05/23/2000	Diab et al.			
	A5	6,236,872	05/22/2001	Diab et al.			
	A6	6,241,663	06/05/2001	Wu et al.			
	A7	6,353,226	03/05/2002	Khalil et al.			
	A8	6,374,129	04/16/2002	Chin et al.			
	A9	2003/0023151	01/20/2003	Khalil et al.			
	A10	6,526,298	02/25/2003	Khalil et al.			
	A11	6,615,061	09/02/2003	Khalil et al.			
	A12	6,630,673	10/07/2003	Khalil et al.			
	A13	6,662,030	12/09/2003	Khalil et al.			
	A14	6,662,031	12/09/2003	Khalil et al.			

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLIC- ATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION
	B1	99/59464	25.11.1999	WO			YES NO
	B2	02/060320	08.08.2002	WO			
	B3	02/082989	24.10.2002	WO			

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C1		Yeh et al., "Monitoring Blood Glucose Changes in Cutaneous Tissue by Temperature-modulated Localized Reflectance Measurements". Clinical Chemistry, Vol. 49:6, 2003; pp. 924-934.
C2		Yeh et al., "Near-infrared thermo-optical response of the localized reflectance of intact diabetic and nondiabetic human skin". Journal of Biomedical Optics, Vol. 8, No. 3, July 2003; pp.534-544.
C3		Khalil et al., "Temperature modulation of the visible and near infrared absorption and scattering coefficients of human skin". Journal of Biomedical Optics, Vol. 8, No. 2, April 2003; pp.191-205.
C4		Wu et al., "Noninvasive Determination of Hemoglobin and Hematocrit Using a Temperature-Controlled Localized Reflectance Tissue Photometer". Analytical Biochemistry, Vol. 287, 2000; pp. 284-293.
C5		Zhang et al., "Investigation of Noninvasive <i>in vivo</i> Blood Hematocrit Measurement Using NIR Reflectance Spectroscopy and Partial Least-Squares Regression". Applied Spectroscopy, Vol. 54, No. 2, 2000; pp. 294-299.
C6		Khalil et al., Method for Modulating Light Penetration Depth in Tissue and Diagnostic Applications Using Same, U.S. Serial Number 09/419,461, filed October 15, 1999.

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## Form PTO - 1449 (Modified)

<b>FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)  (37 CFR 1.98 (b))	<b>ATTY. DOCKET NO.</b> 7286.US.O1	<b>SERIAL NO.</b> 10/763,548
	<b>APPLICANT</b> Michael G. Lowery et al.	
	<b>FILING DATE</b> 01/23/2004	<b>GROUP</b> 3736

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EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
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	A10	6,526,298	02/25/2003	Khalil et al.			
	A11	6,615,061	09/02/2003	Khalil et al.			
	A12	6,630,673	10/07/2003	Khalil et al.			
	A13	6,662,030	12/09/2003	Khalil et al.			
	A14	6,662,031	12/09/2003	Khalil et al.			

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLIC- ATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION
	B1	99/59464	25.11.1999	WO			YES NO
	B2	02/060320	08.08.2002	WO			
	B3	02/082989	24.10.2002	WO			

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C1		Yeh et al., "Monitoring Blood Glucose Changes in Cutaneous Tissue by Temperature-modulated Localized Reflectance Measurements". Clinical Chemistry, Vol. 49:6, 2003; pp. 924-934.
C2		Yeh et al., "Near-infrared thermo-optical response of the localized reflectance of intact diabetic and nondiabetic human skin". Journal of Biomedical Optics, Vol. 8, No. 3, July 2003; pp.534-544.
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**EXAMINER:** Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Please type a plus sign (+) inside this box → ☐

PTO/SB/05 (4/98)  
Approved for use through 09/30/2000. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <small>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))</small>	Attorney Docket No.	6351.US.P2
	First Inventor or Application Identifier	O. S. Khalil
	Title	See 1 in Addendum
	Express Mail Label No.	EE835507761US

<b>APPLICATION ELEMENTS</b> <small>See MPEP chapter 600 concerning utility patent application contents.</small>	<b>ADDRESS TO:</b> Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
1. <input checked="" type="checkbox"/> * Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)	5. <input type="checkbox"/> Microfiche Computer Program (Appendix)
2. <input checked="" type="checkbox"/> Specification [Total Pages <b>55</b> ] (preferred arrangement set forth below) <ul style="list-style-type: none"><li>- Descriptive title of the Invention</li><li>- Cross References to Related Applications</li><li>- Statement Regarding Fed sponsored R &amp; D</li><li>- Reference to Microfiche Appendix</li><li>- Background of the Invention</li><li>- Brief Summary of the Invention</li><li>- Brief Description of the Drawings (if filed)</li><li>- Detailed Description</li><li>- Claim(s)</li><li>- Abstract of the Disclosure</li></ul>	6. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) <ul style="list-style-type: none"><li>a. <input type="checkbox"/> Computer Readable Copy</li><li>b. <input type="checkbox"/> Paper Copy (identical to computer copy)</li><li>c. <input type="checkbox"/> Statement verifying identity of above copies</li></ul>
3. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <b>14</b> ]	<b>ACCOMPANYING APPLICATION PARTS</b>
4. Oath or Declaration [Total Pages <input ]<ul="" type="checkbox"/> <li>a. <input checked="" type="checkbox"/> Newly executed (original or copy)</li> <li>b. <input type="checkbox"/> Copy from a prior application (37 C.F.R. § 1.63(d)) (for continuation/divisional with Box 16 completed)<ul style="list-style-type: none"><li>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b> Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).</li></ul></li>	7. <input type="checkbox"/> Assignment Papers (cover sheet & document(s))
* NOTE FOR ITEMS 1 & 13 IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).	
8. <input type="checkbox"/> 37 C.F.R. § 3.73(b) Statement <input type="checkbox"/> Power of Attorney (when there is an assignee)	
9. <input type="checkbox"/> English Translation Document (if applicable)	
10. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations	
11. <input type="checkbox"/> Preliminary Amendment	
12. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)	
13. <input type="checkbox"/> * Small Entity Statement(s) <input type="checkbox"/> Statement filed in prior application (PTO/SB/09-12) Status still proper and desired	
14. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)	
15. <input type="checkbox"/> Other: _____	

16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No: **09/080,470**

Prior application information: Examiner \_\_\_\_\_

Group / Art Unit: **3736**

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

### 17. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label


(Insert Customer No. or Attach bar code label here)

or ☐ Correspondence address below

Name	Steven F. Weinstock				
	Abbott Laboratories				
Address	Department 377 / AP6D-2				
	100 Abbott Park Road				
City	Abbott Park	State	IL	Zip Code	60064-6050
Country	USA	Telephone	(847) 938-3137	Fax	(847) 938-2623

Name (Print/Type)	David L. Weinstein	Registration No. (Attorney/Agent)	28,128
Signature	<i>David L. Weinstein</i>	Date	October 15, 1999

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



## Addendum

1. METHOD FOR MODULATING LIGHT PENETRATION DEPTH IN TISSUE AND  
DIAGNOSTIC APPLICATIONS USING SAME

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL**

Patent fees are subject to annual revision on October 1.

These are the fees effective October 1, 1997.

Small Entity payments must be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12.

See 37 C.F.R. §§1.27 and 1.28.

TOTAL AMOUNT OF PAYMENT (\$)**1,336.00****Complete if Known**

Application Number	
Filing Date	October 15, 1999
First Named Inventor	O.S. Khalil
Examiner Name	(not yet assigned)
Group / Art Unit	(not yet assigned)
Attorney Docket No.	6351.US.P2

**METHOD OF PAYMENT (check one)**

- 1.
- ☒
- The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number **01-0025**  
 Deposit Account Name **Abbott Laboratories**

- ☒ Charge Any Additional Fee Required Under 37 C.F.R. §§ 1.16 and 1.17 ☐ Charge the Issue Fee Set in 37 C.F.R. §1.18 at the Mailing of the Notice of Allowance

- 2.
- ☐
- Payment Enclosed:
- 
- ☐
- Check
- ☐
- Money Order
- ☐
- Other

**FEE CALCULATION****1. BASIC FILING FEE**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	790	201	395	Utility filing fee	760.00
106	330	206	165	Design filing fee	
107	540	207	270	Plant filing fee	
108	790	208	395	Reissue filing fee	
114	150	214	75	Provisional filing fee	
<b>SUBTOTAL (1)</b>					<b>(\$)<b>760.00</b></b>

**2. EXTRA CLAIM FEES**

Total Claims **52** - 20\*\* = **32** x **18.00** = **576.00**  
 Independent Claims **3** - 3\*\* = **0** x **78.00** = **00.00**  
 Multiple Dependent  =

\*\*or number previously paid, if greater; For Reissues, see below

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
103	22	203	11	Claims in excess of 20	
102	82	202	41	Independent claims in excess of 3	
104	270	204	135	Multiple dependent claim, if not paid	
109	82	209	41	** Reissue independent claims over original patent	
110	22	210	11	** Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>					<b>(\$)<b>576.00</b></b>

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	950	217	475	Extension for reply within third month	
118	1,510	218	755	Extension for reply within fourth month	
128	2,060	228	1,030	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,320	241	660	Petition to revive - unintentional	
142	1,320	242	660	Utility issue fee (or reissue)	
143	450	243	225	Design issue fee	
144	670	244	335	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	790	246	395	Filing a submission after final rejection (37 CFR 1.129(a))	
149	790	249	395	For each additional invention to be examined (37 CFR 1.129(b))	
Other fee (specify) _____					
Other fee (specify) _____					

\* Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$)**0****SUBMITTED BY**Typed or Printed Name **David L. Weinstein**Signature *David L. Weinstein*Date *October 15, 1999***Complete (if applicable)**Reg. Number **28,128**

Deposit Account User ID

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.